

Title (en)

DC power supply device for human powered vehicles

Title (de)

Gleichstromversorgungsvorrichtung für durch Menschenkraft angetriebene Fahrzeuge

Title (fr)

Dispositif d'alimentation en courant continu pour véhicules à propulsion humaine

Publication

EP 1724901 B1 20120516 (EN)

Application

EP 06010558 A 20060522

Priority

JP 2005148062 A 20050520

Abstract (en)

[origin: EP1724901A1] A DC power supply apparatus (10) used with a power storage element (22) comprises a rectifier circuit (20) that converts AC current from an alternating current generator (12) into a DC current; an input current adjusting circuit (24) that receives DC current from the rectifier circuit (20) to adjust current flow from the rectifier circuit (20) to the power storage element (22); an output current adjusting circuit (28) that receives current from the power storage element (22) and adjusts current flow from the power storage element (22) to an output node; and a control circuit (30) that operates at least one of the input current adjusting circuit (24) and the output current adjusting circuit (28) based on a predetermined condition of the power storage element (22).

IPC 8 full level

H02J 7/14 (2006.01); **B60L 11/18** (2006.01); **B62J 6/00** (2006.01)

CPC (source: EP US)

B60L 50/53 (2019.01 - EP US); **B60L 58/14** (2019.01 - EP US); **B60L 58/15** (2019.01 - EP US); **B62J 6/01** (2020.02 - EP US); **H02J 7/1407** (2013.01 - EP US); **Y02T 10/70** (2013.01 - EP US)

Cited by

US11459061B2; EP3680163A1; CN111434575A

Designated contracting state (EPC)

DE FR IT NL

DOCDB simple family (publication)

EP 1724901 A1 20061122; **EP 1724901 B1 20120516**; BR PI0601095 A 20070221; CN 100411274 C 20080813; CN 1881742 A 20061220; JP 2006325372 A 20061130; JP 2008289358 A 20081127; JP 5261063 B2 20130814; TW 200642232 A 20061201; TW I314803 B 20090911; US 2006261785 A1 20061123; US 7292006 B2 20071106

DOCDB simple family (application)

EP 06010558 A 20060522; BR PI0601095 A 20060331; CN 200610084069 A 20060519; JP 2005148062 A 20050520; JP 2008203004 A 20080806; TW 95100345 A 20060104; US 30794206 A 20060228